

SilverWrap™ xR Micro-perforated HD

Product Code: HD-XR-B

Extra R-value

Vapour Permeable reflective wall insulation

For use in brick veneer and drained cavity wall systems in residential and commercial buildings



SilverWrap™ xR Micro-perforated is a Heavy Duty, Vapour Permeable reflective wall wrap designed specifically for use in masonry and brick veneer drained cavity wall systems to reduce the risk of interstitial condensation and enhance thermal performance.

The outward facing reflective anti-glare foil surface provides a reflective air cavity between the stud frame and the brick leaf, adding substantially to the system R-value of the wall. This is a simple way to enhance the home's energy efficiency without requiring a change in common construction practices.

With a precisely applied pattern of micro-perforations, SilverWrap™ xR Micro-perforated delivers Class 4 Vapour Permeance for the effective management of indoor water vapour to reduce the risks of condensation within the masonry veneer wall.

Fully tested in accordance with AS/NZS 4200.1:2017, SilverWrap™ xR Micro-perforated is IR Reflective, Low Flammability and classified as an Air Barrier.

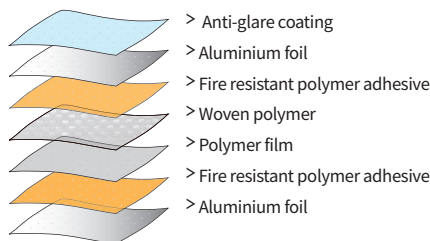
- > Premium double-sided foil
- > Micro-perforated to Class 4 Vapour Permeable
- > Superior strength, light weight
- > Air Barrier
- > Low Flammability, suitable for all BALs in bushfire-prone areas

Application

Class 4 Vapour Permeable wall wraps are not recommended for wet tropical climate zones.

Construction

SilverWrap™ xR Micro-perforated is a flexible multi-layer product made with a combination of low level anti-glare finish to 96% reflective, aluminium foil, anti-oxidant UV-stabilised woven polypropylene, 97% reflective aluminium foil, and fire-resistant polymer adhesive, backed by a UV-stabilised polymer flood coat. In order to minimise shrinkage after installation, our products are pre-shrunk during the manufacturing process.



Ametalin utilises Advanced Laminating Technology; the polymer adhesive remains tacky indefinitely and provides superior resistance to heat, fire and delamination.

Declared Total System R-Values

Brick Veneer Wall

with SilverWrap™ xR Micro-perforated

Winter **R_t 1.72**

Summer **R_t 1.68**

Brick Veneer Wall

with SilverWrap™ xR Micro-perforated + R2.7 fibrous batt

Winter **R_t 3.40**

Summer **R_t 3.26**

R-values apply to typical conditions for mainland Australian capital cities and have been calculated by an independent consulting engineer, in accordance with AS/NZS 4859.1:2018. For detailed design of building systems readers are advised to seek advice from a qualified engineer, based on actual site conditions.

The contributions of this product to the total system R-value depends on installation and environmental conditions.

Material Properties and Classifications

SilverWrap™ xR Micro-perforated Heavy Duty classifications in accordance with AS/NZS 4200.1:2017 and AS/NZS 4859.1:2018

Criteria	Reference	Result	Requirement
Flammability Index	AS 1530.2-1993	Low ≤ 5	High (> 5) / Low (≤ 5)
Nominal Thickness		0.12 mm	Value
Duty	AS/NZS 4200.1:2017	Heavy	Classification
Tensile Strength Machine Direction	AS 1301.448s-91	15.3 kN/m	Min 12.5 kN/m
Tensile Strength Lateral Direction	AS 1301.448s-91	13.1 kN/m	Min 7.5 kN/m
Edge Tear Machine Direction	TAPPI T 470 om-89	499 N	Min 80 N
Edge Tear Lateral Direction	TAPPI T 470 om-89	486 N	Min 80 N
Vapour Control	ASTM E96	Class 4 Vapour Permeable	Class 1 to 4
Vapour Permeance	ASTM E96	1.450 $\mu\text{g}/\text{N.s}$	Value
Water Control	AS/NZS 4201.4:1994	Non-Water Barrier	Classification
Air Control	AS/NZS 4200.1:2017	Air Barrier	Classification
Resistance to Dry Delamination	AS/NZS 4201.1:1994	Pass	Pass
Resistance to Wet Delamination	AS/NZS 4201.2:1994	Pass	Pass
Shrinkage (Repeated wetting & drying)	AS/NZS 4201.3:1994	0.0%	$< 0.5\%$
Electrically Conductive	AS/NZS 4200.1:2017	Conductive	Classification
Emittance Value	AS/NZS 4201.5:1994	Anti-glare side: 0.05, Foil side: 0.03	Value
Emittance Classification	AS/NZS 4200.1:2017	IR Reflective, IR Reflective	Classification
Emittance Category	AS/NZS 4200.1:2017	RR	Category

NCC Compliant

SilverWrap™ xR Micro-perforated complies with AS/NZS 4859.1:2018 and AS/NZS 4200.1:2017, and therefore meets all of the requirements of the National Construction Code of Australia for insulation and sarking-type materials.

SilverWrap™ xR Micro-perforated is classified as a Non-Water Barrier under AS/NZS 4200.1:2017 *Pliable building membranes and underlays, Part 1: Materials*, which requires testing under a 100 mm water column.

Vapour Control

Vapour Permeance: 1.450 $\mu\text{g}/\text{N.s}$
 Vapour Resistance: 0.6897 MN.s/g
 WVTR: 176.0 g/m².24hr

Tested in accordance with AS/NZS 4200.1:2017.

A detailed hygrothermal analysis is recommended for moisture control in building design.

Fire Performance

Flammability Index

Low (≤ 5)

Tested to AS 1530.2-1993 - *Methods for fire tests on building materials, components and structures Part 2: Test for flammability of materials*.

Bushfire Attack Levels

Complies with AS 3959-2018 *Construction of buildings in bushfire-prone areas* for use in all BALs.

Seek independent advice regarding the selection of sarking prior to installation in the BAL design.

Dimensions

1350 mm x 30 m (40 m²)
 Nominal thickness: 0.17 mm

Specification Notes

When specifying, state the following:

Product Name: Ametalin SilverWrap™ xR Micro-perforated

The insulation to be installed shall be Ametalin SilverWrap™ xR Micro-perforated reflective wall wrap with anti-glare and shall be installed in accordance with AS 4200.2: 2017 *Pliable Building Membranes and Underlays, Part 2: Installation*.

Emittance Value: 0.05, 0.03

Emittance classification: IR Reflective, IR Reflective

Vapour Control Classification: Class 4 Vapour Permeable, 1.450 $\mu\text{g}/\text{N.s}$

Water Control Classification: Non-water Barrier

Duty: Heavy in accordance with AS/NZS 4200.1:2017

Complete details available on our website:

<https://www.ametalin.com>

Handling and Storage

Store this product undercover in a clean, dry place in the pack provided out of contact with alkaline products, cement and mortar.

Performance insulation for a greener world

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Durability may be affected by environmental factors, including chemical and airborne pollutants, if used in industrial or farm buildings.

Australian designed for Australian conditions. Manufactured by: Ametalin 9-11 Playford Crescent, Salisbury North S 5108 T: +61 8 8285 6955 F: +61 8 8285 5911 E: info@ametalin.com

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